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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,007	03/16/2004	Leo M. Pedlow JR.	SNY-T5712.02	3328

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MILLER PATENT SERVICES  
2500 DOCKERY LANE  
RALEIGH, NC 27606

EXAMINER
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CHEN, SHIN HON

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/802,007

Applicant(s)

PEDLOW ET AL.

Examiner

Shin-Hon Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 2/16/04, 4/3/04, 3/15/05, 6/2/05, 7/27/05

### DETAILED ACTION

1. Claims 1-22 have been examined.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colligan et al. U.S. Pat. No. 6415031 (hereinafter Colligan) in view of Nardone et al. U.S. Pat. No. 5805700 (hereinafter Nardone).

4. As per claim 1, Colligan discloses a method of processing digital video content, wherein the digital video content comprises intra-coded frames and inter-coded frames, the method comprising: encrypting intra-coded frames (Colligan: column 11 lines 48-57: if I-Frame data is indicated, then selective encryption takes place); encrypting the selected frames under a first encryption algorithm to produce first encrypted frames (Colligan: column 7 lines 45-59: different types of encryption algorithms may be applied for encryption); storing the inter-coded frames in a first file; storing the intra-coded frames, whether encrypted under the first encryption algorithm or unencrypted, in a second file (Colligan: column 7 lines 35-59; column 11 lines 48-57: if different types of encryptions take place, only I-frame portion of the data are different). Colligan

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does not explicitly disclose that the selecting a plurality of intra-coded frames for encryption. However, Nardone discloses that limitation (Nardone: column 6 lines 34-45: only selected I-frames are selected for encryption). It would have been obvious to one having ordinary skill in the art to encrypt selected I-frames for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Nardone within the system of Colligan because it reduces overhead to encrypt the entire content.

5. Claims 2-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colligan in view of Nardone and further in view of Simec et al. U.S. Pub. No. 20040010717 (hereinafter Simec).

6. As per claim 19, Colligan discloses a method of processing digital video content, wherein the digital video content comprises intra-coded frames and inter-coded frames, the method comprising: selecting a plurality of the intra-coded frames for encryption to produce selected frames (Colligan: column 11 lines 48-57: if I-Frame data is indicated, then selective encryption takes place); encrypting the selected frames under a first encryption algorithm to produce first encrypted frames (Colligan: column 7 lines 45-59: different types of encryption algorithms may be applied for encryption); storing the inter-coded frames in a first file; storing the intra-coded frames, whether encrypted under the first encryption algorithm or unencrypted, in a second file (Colligan: column 7 lines 35-59; column 11 lines 48-57: if different types of encryptions take place, only I-frame portion of the data are different); duplicating the intra-coded frames;

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encrypting duplicates of the selected frames under a second encryption algorithm to produce second encrypted frames (Colligan: column 7 lines 35-59; column 11 lines 48-57: different algorithms may be used); storing the intra-coded frames, whether encrypted under the second encryption algorithm or unencrypted, in a third file (Colligan: column 7 lines 35-44: the data are pre-encrypted); receiving a request from a subscriber terminal for the digital content; and retrieving the content from the first file and the third file; and sending the content to the subscriber terminal. (Colligan: column 7 lines 35-44: VOD system). Colligan does not explicitly disclose that the selecting a plurality of intra-coded frames for encryption. However, Nardone discloses that limitation (Nardone: column 6 lines 34-45: only selected I-frames are selected for encryption). It would have been obvious to one having ordinary skill in the art to encrypt selected I-frames for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Nardone within the system of Colligan because it reduces overhead to encrypt the entire content. Colligan as modified does not explicitly disclose determining that the subscriber is enabled for decryption of content under the first/second encryption algorithm. However, Simec discloses checking subscriber configurations prior to transmitting data to subscribers (Simec: [0015]-[0016]). It would have been obvious to one having ordinary skill in the art to determine if the subscriber is authorized to decrypt the protected data prior to sending the data. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Simec within the combination of Colligan-Nardone because it prevents unauthorized devices from copying protected digital data.

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7. As per claim 20, Colligan as modified discloses the method of claim 19. Colligan as modified further discloses the content is retrieved from the first and third files in an order of sequential frames in the content (Nardone: column 3 lines 19-28).

8. As per claim 2-18 and 21-22, claims 2-18 and 21-22 encompass the same scope as claims 19-20. Therefore, claims 1-18 and 21-22 are rejected based on the same reason set forth in claims 19 and 20.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grab et al. U.S. Pub. No. 20040081333 discloses method for securing compressed digital video by encrypting selected frames of a sequence of frames in accordance with a frame encryption function.

Vince U.S. Pub. No. 20030228018 discloses seamless switching between multiple pre-encrypted video files.

Dallard et al. U.S. Pub. No. 20030188154 discloses method for pre-encryption of transmitted content.

Son et al. U.S. Pub. No. 20040091109 discloses secure distribution of video on-demand.

Yu U.S. Pub. No. 20040028227 discloses partial encryption of stream-formatted media.

Peterka et al. U.S. Pub. No. 20030140257 discloses encryption for multimedia content pre-encryption.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen  
Examiner  
Art Unit 2131

SC

CHRISTOPHER REVAK  
PRIMARY EXAMINER

  
2/25/06